United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/711,161	08/28/2004	Johan Hederstierna	7589.188.PCUS00	• 5160	
28694 7590 03/14/2007 NOVAK DRUCE & QUIGG, LLP				EXAMINER	
1300 EYE STR	EET NW		BURCH, MELODY M		
SUITE 1000 WEST TOWER WASHINGTON, DC 20005			ART UNIT	PAPER NUMBER	
			3683		
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVER	DELIVERY MODE	
3 MO	NTHS	03/14/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)			
Office Action Summary		10/711,161	HEDERSTIERNA, JOHAN			
		Examiner	Art Unit			
		Melody M. Burch	3683			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Respons	ive to communication(s) filed on <u>30 Ja</u>	nuary 2007				
· <u> </u>	This action is FINAL . 2b) ☐ This action is non-final.					
·	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Cla	·					
4)⊠ Claim(s).	4)⊠ Claim(s) <u>1-4,7-13 and 15-17</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
	5) Claim(s) is/are allowed.					
· <u> </u>	6)⊠ Claim(s) <u>1-4,7-13 and 15-17</u> is/are rejected.					
<u>—</u>						
	are subject to restriction and/or	election requirement.				
Application Papers						
9) The specification is objected to by the Examiner.						
10) \boxtimes The drawing(s) filed on <u>28 August 2004</u> is/are: a) \square accepted or b) \boxtimes objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
· ·						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsp	erson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ite			
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application 6) Other:						
• •						

Art Unit: 3683

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitation of the central section of the leaf spring being attached to the support bracket as recited and as described in the remarks must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Examiner notes that Applicant responds in the remarks as if the central section of the spring is a section shown in the area of element 2 in the DT'864 reference. However, such a central section is not illustrated in the instant invention.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

Application/Control Number: 10/711,161 Page 3

Art Unit: 3683

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Sheets" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 1 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "a support bracket for attachment thereto of a spring by a central section thereof" is indefinite. It is unclear to the Examiner whether the "thereof" refers to the support bracket or the spring. In light of Applicant's remarks filed 1/30/07, Examiner has interpreted the "thereof" as referring to the spring. Clarification is required.

Art Unit: 3683

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-4, 7-13, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over DT-2312864 (DT'864) in view of US Patent 5271678 to Bourgeot.

Re: claims 1, 11, 12, 13, 15, and 16. DT'864 shows in figure 3 a bearing arrangement for mounting the spring suspension for a leaf-spring-supported bogie on a vehicle, the arrangement comprising: a bracket 12 configured for fixed attachment to a vehicle, a leaf spring support 9 including a support bracket for attachment thereto of a spring 7 by a central section, particularly, the central section of the cross-section thereof, and two bearing elements (left and right elements 10).

DT'864 lacks the limitation of the each of the bearing elements comprising a plurality of conical coaxial tubular supporting elements and at least one conical tubular liner.

Bourgeot teaches in the figure on the front of the patent the use of a bearing arrangement wherein a bearing element 5 comprises a plurality of conical coaxial tubular supporting elements 6 and at least one conical tubular liner 7.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the bearing elements of DT'864 to have included

Art Unit: 3683

a plurality of conical coaxial tubular supporting elements and at least one conical tubular liner, as taught by Bourgeot, in order to provide a means of more effectively resiliently supporting loads. With regards to claim 13 the clamping device is element 17.

Re: claim 2. DT'864, as modified, teach in figure 3 of DT'864 the bearing elements being restrained between the leaf spring support 9 and the bracket 12 with a pretensioning thereby induced in the bearing elements in an axial direction thereof via element 17.

Re: claims 3 and 4. DT'864, as modified, teach in the figure on the front of the patent of Bourgeot the limitation wherein the supporting elements 6 vary in length in the axial direction so that an innermost supporting element shown in the area of 7a is longer than an outermost supporting element shown in the area of 7g.

Re: claims 7-10. DT'864, as modified, describes the invention substantially as set forth above, but does not include the specific material limitations.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the supporting elements and liners to have been made of metal or composite material and rubber or plastic, respectively, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Re: claim 17. DT'864 shows in figure 3 the limitation wherein a central section of the stack of the number of spring leaves is fixed to the leaf spring support by clamps 13 and 14.

Art Unit: 3683

Response to Arguments

7. Applicant's arguments filed 1/30/07 have been fully considered but they are not persuasive.

Applicant argues that DT'864 (Wende) fails to teach or suggest a leaf spring constructed from a number of leaf springs held as a stack in a bracket of a bogie support. Examiner disagrees and notes that figures 1 and 3 together show the recited limitation. Although a single leaf of spring 7 is shown connected to the top portion of the support 9, Examiner observes that a number of leaves, particularly two leaves, held as a stack is shown connected to the bottom of the support 9.

Applicant also argues that Wende fails to teach a support bracket or attachment of a central section of a leaf spring to the leaf spring support. Examiner notes that the element in the area of the lead line of number 9 is a support bracket and that the central section of the leaf spring 7 (particularly the central section of the bottom leaves of the spring) is attached to the leaf spring support 9 as clearly shown in figure 3.

Accordingly, the rejections have been maintained.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 3683

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan can be reached on 571-272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/711,161 Page 8

Art Unit: 3683

March 9, 2007

Melody M. Burch
Primary Examiner
Art Unit 3683
3/9/07